

ABSTRACT OF THE DISCLOSURE

Disclosed herein is a method of producing a hydrogel without using crosslinking agents or reducing agents of low-temperature redox initiators as used in conventional gelation, for example, without detrimentally influencing the state of emulsion in emulsion polymerization, and capable of conveniently forming a crosslinked synthetic polymer.

Thus, disclosed herein is a method for producing a synthetic polymer gel, comprising steps of preparing an aqueous solution comprising at least one persulfate and at least one type of water-soluble vinyl monomer chosen from among compounds having an acryloyl structure, then irradiating said aqueous solution with UV light. Also disclosed is the optional method further comprising a step of preparing an emulsion wherein said aqueous solution is emulsified in a water-immiscible medium.